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09/777,122	02/05/2001	Heinz Greiner	188.463	2422

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT PAPER NUMBER

3683

DATE MAILED: 11/19/2003

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**GROUP 3600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 17

Application Number: 09/777,122  
Filing Date: February 05, 2001  
Appellant(s): GREINER, HEINZ

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Charles A. Muserlian  
For Appellant

**EXAMINER'S ANSWER**

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This is in response to the appeal brief filed 9/18/03.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1, 2 and 4-6 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

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**(9) Prior Art of Record**

EP 318980 A1

Tonogai

6-1989

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1,2 and 4-6 are rejected under 35 U.S.C. 102(b)/103(a). This rejection is set forth in prior Office Action, Paper No. 6.

Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tonogai.

Re: claims 1 and 2, Tonogai shows a linear rolling bearing, as in the present invention, comprising: a guide carriage with a U-shaped cross section in figure 8 having a U-crossbar and two U-legs so that the guide carriage forms a carriage cavity and partially surrounds a guide rail while being slidably supported through balls on two longitudinal sides of the guide rail, each U-leg of the guide carriage having on an inner surface opposing the guide rail a ground raceway with an approximately quarter circle cross-section for the balls and stop surface 21 having a retaining contour for a guide member 50 containing the balls B is configured on a guide rail-distal outer surface of each U-leg of the guide carriage. Tonogai discloses the structure of the linear rolling bearing as claimed in claim 1. Tonogai is silent of a process of grinding the stop surface and the raceway of the U-leg using one grinding wheel and are made in one common work step. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Tonogai's linear rolling bearing using a one step process in order to save cost and time. Saving cost and time is always a

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goal in any manufacturing process. It appears that the Applicant is claiming the linear rolling bearing by the process that it is made. The court rules, see In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985), that the determination of patentability in a product-by process claim is based on the product itself, even though the claim may be limited and defined by the process.

Re: claim 4, figure 7(a) shows the guide member 50 to be detachably fixed on the guide carriage and extend in longitudinal direction from raceways of the guide rail 96, the balls form endless ball circuits and the guide members comprise for each ball circuit, a region for load-bearing balls, a return canal for returning balls and two deflecting canals that connect the region for load-bearing balls and the return canal to each other at ends thereof.

Re: claim 5, see figures 7(a) and 8.

Re: claim 6, figure 8 shows the opening of the lower return canal to be smaller than the diameter of the balls inserted in the return canal.

**(11) Response to Argument**

Appellant argues in page 4 of the brief that Tonogai's linear ball bearing comprises an approximately semi-circular cross-section for a load bearing balls and a lower groove with approximately a quarter-circle cross-section for load bearing balls. This is true as shown in figure 8 of Tonogai. In claim 1 of the instant invention, Appellant claims only one "approximately quarter circle cross-section for the balls" on lines 5 and 6 of claim 1 in the **APPENDIX** of the brief. As stated in the Final Rejection, the determination of patentability in a product-by-process claim is based on the product

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itself, even though the claim may be limited and defined by the process, see In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985) and MPEP 2113.

Hence, Tonogai's linear ball bearing meets the limitation of one "approximately quarter circle cross-section for the balls" of claim 1. When two quarter circle cross-section raceways are claimed as in claim 3, the Examiner has agreed that the limitation of two quarter circle cross-section raceways defines over the prior art of record. Hence claims 3 and 7 have been allowed.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

XLN

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November 12, 2003


Conferees

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